

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Shinji MURAI, et al.

SERIAL NO: NEW APPLICATION

GAU:

FILED: HEREWITH

EXAMINER:

FOR: DYE-SENSITIZED SOLAR CELL

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

- ☒ The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

- ☒ Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

- ☐ Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

- ☒ Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



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C. Irvin McClelland
Registration Number 21,124

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CERTIFICATION

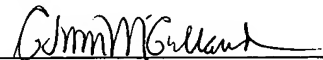
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Registration Number 21,124

LIST OF RELATED CASES

<u>Docket Number</u>	<u>Serial or Patent Number</u>	<u>Filing or Issue Date</u>	<u>Inventor/ Applicant</u>
224957US0 SRD	10/180,018	06/27/02	MURAI et al.
231995US0 SRD	10/326,131	12/23/02	MURAI et al.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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SERIAL NO.: New Application

FILED: Herewith

FOR: DYE-SENSITIZED SOLAR CELL

STATEMENT OF RELEVANCY

Reference AO (1-220380) on Form PTO-1449:

This discloses the regenerative photo-electrochemical cell which comprises a polycrystalline metal oxide semiconductor layer having a substantially monomolecular chromophore layer in a surface zone.

Reference AP (2002-289268) on Form PTO-1449:

The present invention relates to an electrolyte composition comprising an electrolyte containing at least one kind of an imidazolium salt and gel reagents.

Reference AQ (2001-102103) on Form PTO-1449:

This reference relates to an electrode characterized by having a dye and a molecule which controls electric charge.

Reference AW (Tae-sik KANG, et al. "Enhanced Stability of Photocurrent-Voltage Curves in Ru(II)-Dye-Sensitized Nanocrystalline TiO₂ Electrodes with Carboxylic Acids", JOURNAL OF THE ELECTROCHEMICAL SOCIETY, Vol. 147 (8), 2000, pgs. 3049-3053) on Form PTO-1449:

This reference relates to a Ru(II)-dye-sensitized TiO₂ solar cell with the addition of carboxylic acid in I⁻/I₃ acetonitrile solution.

Reference AX (S. Y. HUANG, et al., "Charge Recombination in Dye-Sensitized Nanocrystalline TiO₂ Solar Cells", J. PHYS. CHEM, Vol. B 101, 1997, pgs. 2576-2582) on form PTO-1449:

This reference relates to a Ru(II)-dye-sensitized TiO₂ solar cell with the addition of a basic material such as t-butylpyridine and polyvinylpyridine.

Reference AY (Emilio PALOMARES, et al., "Slow charge recombination in dye-sensitized solar cells (DSSC) using Al_2O_3 coated nanoporous TiO_2 films", CHIME.COMM., 2002, pgs. 1464-1645:

This reference relates to a Ru(II) -dye-sensitized TiO_2 solar cell by using of composite metal oxide such as the Al_2O_3 .

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 247955US2SRD		SERIAL NO. NEW APPLICATION	
LIST OF REFERENCES CITED BY APPLICANT				APPLICANT Shinji MURAI, et al.			
FILING DATE HEREWITH				GROUP			

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	AA	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						
	AM						
	AN						

FOREIGN PATENT DOCUMENTS						
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	AQ	1-220380	09/04/89	Japan		X
	AP	2002-289268	10/04/02	Japan		X
	AQ	2001-102103	04/13/01	Japan		X
	AR					
	AS					
	AT					
	AU					
	AV					

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)		
	AW	Tae-sik KANG, et al., "Enhanced Stability of Photocurrent-Voltage Curves in Ru(II)-Dye-Sensitized Nanocrystalline TiO ₂ Electrodes with Carboxylic Acids", JOURNAL OF THE ELECTROCHEMICAL SOCIETY, Vol. 147 (8), 2000, pgs.3049-3053
	AX	S. Y. HUANG, et al., "Charge Recombination in Dye-Sensitized Nanocrystalline TiO ₂ Solar Cells", J. PHYS.CHEM, Vol. B 101, 1997, pgs. 2576-2582
	AY	Emilio PALOMARES, et al., "Slow charge recombination in dye-sensitized solar cells (DSSC) using Al ₂ O ₃ coated nanoporous TiO ₂ films", CHEM.COMM., 2002, pgs. 1464-1645
	AZ	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="flex-grow: 1;"></div> <div> <input type="checkbox"/> Additional References sheet(s) attached </div> </div>
Examiner		Date Considered

*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.